

University of Texas at Austin (#74-R-0029/ 1453)
IACUC-approved exemption FY 2021

Minimum space for non-human primates housed in groups or pairs: The USDA Animal Welfare Regulations (§ 3.81) and the *Guide* stipulate minimum floor space for pair or group-housed non-human primates. Multiple investigators requested exemptions to these requirements per the descriptions below:

- a) Pair-house marmosets may be housed in vertical cages with a floor space of 3.13 ft², which is just below the USDA requirement of 3.2 ft² for two marmosets. This is also below the standard in the *Guide* of 4.2 ft². These cages are 6 feet tall, however, which is important for an arboreal primate.
- b) Families of four marmosets (plus infants younger than 6 months) may be housed in large vertical cages with a floor space of 6.0 ft², which is just below the USDA requirement of 6.4 ft² for four marmosets and the *Guide* requirement of 8.4 ft². These cages are 6 feet tall, which is important for an arboreal primate. These cages can be used to house a small family unit, which could include four marmosets greater than six months of age plus infant marmosets younger than 6 months of age. USDA regulations do not consider non-human primate infants under 6 months of age into floor space calculations.
- c) Families of six marmosets when animals are more than 6 months in age may be housed in large vertical cages with a floor space of 6.2 or 6.64 ft². The *Guide* recommends a floor space of 12.6 ft² and the USDA requires 9.6 ft². These cages are 6 feet tall, which is important for an arboreal primate. For six animals, this would mean that the volume per animal is at least 6.2 cubic feet. The *Guide* suggests a minimum of 5.25 cubic feet and the USDA requires 2.65 cubic feet for Group 1 primates (primates that weigh less than 1.5 kg). Marmosets weigh less than 0.6 kg. The justification behind this departure is to allow groups to remain together until the eldest offspring is mature enough to move to an additional cage.

Each cage will contain one or more branches and 1-2 nest boxes where marmosets typically sleep, which are suspended off the floor and measure 8" by 15", adding additional horizontal floor space. Cages may also contain shelves, adding additional horizontal space (nest boxes and shelves were not included in the floor space calculations above). These arrangements allows the animals to take full advantage of the vertical space in the cage.

According to the *Guide* "Consideration of floor area alone may not be sufficient in determining adequate cage size; with some species, cage volume and spatial arrangement may be of greater importance" (p. 56). In addition, the *Guide* states: "Overall cage volume and linear perch space should be considerations for many neotropical and arboreal [primate] species" (p. 61). These statements are particularly relevant to marmosets. The IACUC is confident that at a minimum, the animals will have enough space to express their natural postures and postural adjustments without touching the enclosure walls or ceiling, be able to turn around, and have ready access to food and water.